

Clean Michigan Initiative Clean Water Fund Grant

Wayne County Department of Environment Water Quality Division



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Illicit Discharge Elimination for the Rouge River September 15, 2004 through June 30, 2007 (Amended)

The major goal of this project was to find and eliminate illicit connections in portions of the Lower 1 and Lower 2 Stormwater Management Areas (SWMAs) of the Rouge River Watershed. A major tributary of the Detroit River, the Rouge River watershed covers 467 square miles. Land use in the watershed is 72% urban, 12% forested, 8% agricultural, 5% water/wetlands, and 3% other uses. Various segments of the Rouge River are included on the current 305(b) and 303(d) lists for the State of Michigan due to a variety of sources of impairment, including untreated sewage discharges. Wayne County established partnerships with Lower 1 and Lower 2 Rouge River SWMA communities with coverage under the MDEQ watershed-based storm water permit in order to facilitate implementation of community Illicit Discharge Elimination Plans. The project objectives to identify and eliminate illicit connections are consistent with the goals of the Watershed Management Plans for the Lower 1 & 2 SWMAs. An unique aspect to the project is the continuing effort to restore recreational opportunities in the Lower Rouge River, which benefit all residents in the watershed. Dye testing commercial and industrial facilities in targeted areas was the primary focus of the effort. Water quality data identified a tributary in the Lower 1 SWMA with elevated *E. coli* concentrations. An outfall survey identified a suspicious outfall with elevated levels of E. coli. Investigations in the residential area storm sewer to determine the E. coli source, was initiated under this grant. This project resulted in correcting 76 illicit connections and discharges.

Grant Amount: \$250,411 Match Funds: \$250,411 Total Amount: \$500,822



Project Accomplishments:

- Inspected 821 facilities
- Found 26 facilities with 68 illicit connections
- · Found 8 facilities with 9 illicit discharges
- · Walked 2.4 miles of stream
 - Surveyed 66 outfalls
 - Investigated one suspicious outfall
 - 21 facilities corrected 34 illicit connections and discharges
 - 76 illicit connections and discharges corrected

Annual Pollutant Load Reductions:

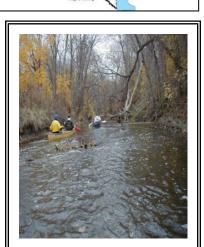
- Prevented 1.5 million gallons of polluted water from entering Rouge River per year.
- Prevented 9,100 pounds of polluting materials from entering the river per year.





- · City of Wayne
- · City of Inkster
- · City of Romulus
- · Township of Canton
- · Township of Van Buren
- Michigan Department of Environmental Quality-Water Bureau

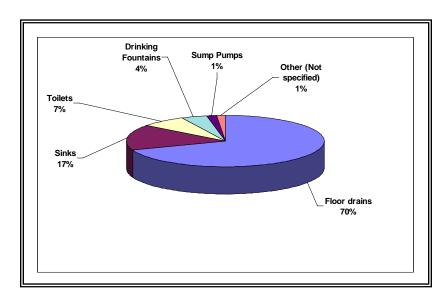




Canoeing the Lower Rouge River

Information and Education Activities:

- Partnering with the communities educated city staff about illicit connections, their water quality impact and the importance of finding and eliminating them.
- Facility inspections allowed staff to interact with the business community on a personal level and educate them on their role in preventing the pollution of Michigan water resources.



Description: Types of Illicit Connections Found in the Lower Rouge River Watershed, September 2004 through May 2007

Pollutant	Estimated amount of polluting material prevented from entering Lower Rouge annually (Lbs/year)*
Total Suspended Solids	1,298
Surfactants	560
Total Organic Carbon	365
Potassium	481
Ammonia	335
Biological Oxygen Demand (5 Day)	1,040
Total Solids	4,745
Phosphorus	347
Total Pounds	9,171
Flow (gallons/year)	1,587,715

^{*}Assumes the removal of all illicit connections identified under this project

Description: Summary of Estimated Pollutant Load Reductions to the Lower Rouge River Resulting from Correction of the Illicit Connections and Discharges during the period September 2004 through May 2007.